

*STACHYTARPHETA BICOLOR* f. *PILOSULA* Mold., f. nov.

Haec forma a forma typica speciei caulibus foliisque inflorescentiisque parce pilosulis recedit.

This form differs from the typical form of the species in having its stems, branches, leaves, and inflorescences sparsely pilosulous throughout.

The form is based on *André M. de Carvalho & Pessôal do Projeto Flora "Pedra do Cavalo" 539* from a gallery forest on the margin of the *Río Paraguaçu*, 12°32'35" S. and 39° 3'6" W., in the *Município de Conceição de Feira, Bahia, Brazil*, collected on February 17, 1981, and deposited in my personal herbarium. The collectors describe the plant as a subshrub, about 1 m. tall, the leaves bicolored, the flowers handsome, the corollas cobalt-blue, whitish on the interior of the tube.

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ADDITIONAL NOTES ON THE GENUS *LIPPIA*. XVII

Harold N. Moldenke

*LIPPIA PALMERI* S. Wats.

Additional bibliography: Anon., *Biol. Abstr.* 68: 3939. 1979; Hocking, *Excerpt. Bot. A.33*: 88. 1979; Mold., *Phytologia* 41: 148 (1979) and 44: 328. 1979; Mold., *Phytol. Mem.* 2: 65, 70, 421, & 561. 1980; Wiggins, *Fl. Baja Calif.* 530 & [531], fig. 499. 1980; Mold., *Phytologia* 48: 185. 1981.

Additional illustrations: Wiggins, *Fl. Baja Calif.* [531], fig. 499. 1980.

Recent collectors describe this plant as a shrub, 1--1.5 m. tall, the leaves sweet (minty)-scented, and have found it growing in rocky arroyos and on rocky mountains along with *Cereus*, *Bursera*, *Larrea*, and *Fouquieria*, at 50 m. altitude, flowering in February. The corollas are said to have been "cream, orange in tube" on *Spellenberg & Spellenberg 4959* and "white" on *Moran & Reveal 20085*. *Moran & Reveal* refer to it as "occasional".

The *Carter & Ferris 4044* previously cited by me as the typical form of the species, seems better (at least insofar as the *Britton Herbarium* specimen) regarded as f. *spicata*.

Additional citations: MEXICO: Baja California: *Moran & Reveal 20085* (ld). Sonora: *Spellenberg & Spellenberg 4959* (N).

*LIPPIA PALMERI* f. *SPICATA* (Rose) Mold., *Phytologia* 44: 328. 1979.

Additional bibliography: Mold., *Phytologia* 39: 391--392 (1978) and 44: 328. 1979; Mold., *Phytol. Mem.* 2: 65, 70, 421, & 561. 1980; Wiggins, *Fl. Baja Calif.* 530. 1980.

Recent collectors have encountered this plant growing on slopes with *Lysiloma candida*, *Mimosa purpurascens*, *Jatropha cinerea*, *Sapium biloculare*, *Jacquemontia*, and *Ruellia*, at 600 m. altitude, describing it as a slender, erect shrub, to 1.5 m. tall, and reporting the vernacular name, "orégano". They have found it in anthesis in March. The corollas are said to have been "white to

pale-lavender" on Carter & Ferris 4044, a collection distributed as and previously cited by me as typical *L. palmeri* S. Wats., but at least the Britton Herbarium specimen of it is better regarded as the present not-too-well marked form.

Additional & emended citations: MEXICO: Baja California: Carter & Ferris 4044 (Au--271014, Ca--199584, Gg, N).

*LIPPIA PEARSONI* Mold.

Additional bibliography: Mold., *Phytologia* 39: 392--393 (1978) and 40: 203. 1978; Mold., *Phytol. Mem.* 2: 234, 246, & 561. 1980.

*LIPPIA PEARSONI* var. *SESSILIS* Mold.

Additional bibliography: Mold., *Phytologia* 39: 393. 1978; Mold., *Phytol. Mem.* 2: 234 & 561. 1980

*LIPPIA PEDUNCULATA* H. H. W. Pearson

Additional bibliography: Mold., *Phytologia* 39: 393. 1978; Mold., *Phytol. Mem.* 2: 246 & 561. 1980.

*LIPPIA PEDUNCULOSA* Hayek

Additional bibliography: Mold., *Phytologia* 39: 393. 1978; Mold., *Phytol. Mem.* 2: 149 & 561. 1980.

*LIPPIA PENDULA* Rusby

Additional bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 40 (2): 335. 1915; Mold., *Phytologia* 41: 148. 1979; Mold., *Phytol. Mem.* 2: 149, 175, & 561. 1980.

Additional citations: BOLIVIA: La Paz: *Boeke 1452* (N).

*LIPPIA PETIOLATA* Mold.

Additional bibliography: Hocking, *Excerpt. Bot.* A.25: 379. 1975; Mold., *Phytologia* 39: 393. 1978; Mold., *Phytol. Mem.* 2: 149 & 561. 1980.

*LIPPIA PHAEOCEPHALA* Briq.

Additional bibliography: Mold., *Phytologia* 39: 393--394. 1978; Mold., *Phytol. Mem.* 2: 178, 180, & 561. 1980.

*LIPPIA PHRYXOCALYX* Briq.

Additional bibliography: Mold., *Phytologia* 39: 394. 1978; Mold., *Phytol. Mem.* 2: 149, 178, & 562. 1980.

*LIPPIA PLICATA* J. G. Baker

Additional & emended bibliography: R. E. Fries, *Wiss. Ergebn. Schwed. Rhodes.-Exped. Bot.* 2 (2): 273. 1916; Good & Exell, *Journ. Bot.* 68: Suppl. 2: 139--140. 1930; Mold., *Phytologia* 39: 394--395. 1978; Mold., *Phytol. Mem.* 2: 220, 222, 227, 234, 236, 239, 241, & 562. 1980.

Fries (1916) comments that "Die Art ist bisher nur von Fwanbo (in Urungu etwas südlich vom Tanganyika) angegeben, wo sie von Carson gesammelt wurde (n. 81). Dieses Exemplar habe ich in Kew Herbarium gesehen und mit dem meinigen aus der Bangweolo-Gegend identisch gefunden. *Lippia plicata* scheint

jedoch in Afrika eine weite Verbreitung über die südlichen Teile der Tropen zu haben. Im Herbarium des Bot. Museums zu Berlin habe ich nämlich zwei aus Angola stammende Exemplare gefunden und zwar in Benguella auf Mount Elende von Wellman (n. 1292) und bei Malange von Gossweiler (n. 1049) gesammelt."

*LIPPIA PLICATA* var. *ACUMINATA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 39: 395. 1978; Mold., *Phytol. Mem.* 2: 220, 234, 241, & 562. 1980.

*LIPPIA PLICATA* var. *PARVIFOLIA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 39: 395. 1978; Mold., *Phytol. Mem.* 2: 220 & 562. 1980.

*LIPPIA POHLIANA* Schau.

Additional bibliography: Mold., *Phytologia* 39: 438--439. 1978; Hocking, *Excerpt. Bot. A.33*: 88. 1979; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA POHLIANA* var. *LONGIBRACTEOLATA* Mold.

Additional bibliography: Mold., *Phytologia* 39: 438--439. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA POLYTRICHA* Briq.

Additional bibliography: Mold., *Phytologia* 39: 439. 1978; Mold., *Phytol. Mem.* 2: 178 & 562. 1980.

*LIPPIA POSSENSIS* Mold.

Additional bibliography: Mold., *Phytologia* 39: 439. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA PRAECOX* Mildbr.

Additional bibliography: Mold., *Phytologia* 39: 439. 1978; Mold., *Phytol. Mem.* 2: 239 & 562. 1980.

*LIPPIA PRETORIENSIS* H. H. W. Pearson

Additional bibliography: Mold., *Phytologia* 39: 439--440 & 447 (1978) and 40: 203 & 204. 1978; Mold., *Phytol. Mem.* 2: 246 & 562. 1980.

*LIPPIA PRIMULINA* S. Moore

Additional bibliography: Mold., *Phytologia* 39: 440. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA PRIMULINA* var. *GOYAZENSIS* S. Moore

Additional bibliography: Mold., *Phytologia* 39: 440. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA PRINGLEI* Briq.

Additional & emended bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 39 (2): 320. 1913; H. N. & A. L. Mold., *Pl. Life* 2: 51, 66, & 77. 1948; Mold., *Phytologia* 41: 149 & 151. 1979; Mold., *Phytol. Mem.* 2: 65, 357, & 562. 1980.

Recent collectors describe this plant as a shrub or tree, 3.5-7 m. tall, with a single trunk, the fruit "café", and have found it at 400--1350 m. altitude, in flower in March and November and both in flower and fruit in December and February. The corollas are said to have been "yellowish" on *Kinnach & Sanchez-Mejorada 2037 & 2244* and "rose" on *Delgadillo M. 209*.

The *Calzada 2170*, distributed as *L. umbellata* Cav. and previously cited by me as *L. pringlei*, actually seems to represent *Lippia torresii* Standl.

Additional citations: MEXICO: Morelos: *Miranda 1193* (Me--73562), 9322 (Me--74569). Oaxaca: *Delgadillo M. 209* (Me--229112), 220 (Me--229650); *Miranda 1063* (Me--73563). Sinaloa: *Kinnach & Sanchez-Mejorada 2037* (W--2904483), 2244 (W--2904475).

*LIPPIA PRINGLEI* var. *INTECTA* Mold.

Additional bibliography: Mold., *Phytologia* 39: 443. 1978; Mold., *Phytol. Mem.* 2: 65 & 562. 1980.

*LIPPIA PSEUDO-THEA* (A. St.-Hil.) Schau.

Additional bibliography: Stapf, *Ind. Lond.* 4: 39. 1930; Angely, *Bot. Aplic. Farm.* 267, 297, & 307. 1958; Imbesi, *Ind. Piante* 450. 1964; Mold., *Phytologia* 41: 149 (1979) and 43: 295. 1979; Mold., *Phytol. Mem.* 2: 149, 417, & 562. 1980.

Angely (1958) reports the local vernacular names, "chá de frade", "chá de pedestre", and "capitão do mato" and states that in Brazil the leaves and tops of the shoots of this plant are employed medicinally.

Additional citations: BRAZIL: Minas Gerais: *Hatschbach 30140* (Id).

*LIPPIA PUMILA* Cham.

Additional bibliography: Mold., *Phytologia* 39: 444--445. 1978; Mold., *Phytol. Mem.* 2: 149, 421, & 562. 1980.

*LIPPIA RADULA* J. G. Baker

Additional bibliography: Mold., *Phytologia* 39: 445. 1978; Mold., *Phytol. Mem.* 2: 231 & 562. 1980.

*LIPPIA RAMBOI* Mold.

Additional bibliography: Mold., *Phytologia* 39: 445. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA RAMBOI* var. *PILOSA* Mold.

Additional bibliography: Mold., *Phytologia* 39: 445. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA RECOLLETAE* Morong

Additional bibliography: Mold., *Phytologia* 39: 445--446 (1978) and 40: 70. 1978; Mold., *Phytol. Mem.* 2: 149, 175, 178, 189, 421, & 562. 1980.

Additional citations: PARAGUAY: *Arbo, Tressens, Schinini, & Ferrucci 1939* (N); *Sparre & Verveorst 943* (N).

*LIPPIA RECOLLETAE* var. *PICKELII* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 39: 446. 1978; Mold., *Phytol. Mem.* 2: 178 & 562. 1980.

*LIPPIA REHMANNI* H. H. W. Pearson

Additional bibliography: Mold., *Phytologia* 39: 439 & 446--447 (1978) and 40: 59, 203, & 204. 1978; Mold., *Phytol. Mem.* 2: 220, 243, 244, 246, & 562. 1980.

*LIPPIA RETICULATA* Hayek

Additional bibliography: Mold., *Phytologia* 39: 448. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA RHODOCNEMIS* Mart. & Schau.

Additional bibliography: Mold., *Phytologia* 39: 448 (1978) and 43: 295. 1979.

Additional citations: BRAZIL: Minas Gerais: Irwin, Fonseca, Souza, Reis dos Santos, & Ramos 28507 (N).

*LIPPIA RIEDELIANA* Schau.

Additional bibliography: Mold., *Phytologia* 39: 448. 1978; Mold., *Phytol. Mem.* 2: 149, 421, & 562. 1980.

*LIPPIA RIGIDA* Schau.

Additional bibliography: Mold., *Phytologia* 39: 448--449. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980; Mold. & Bromley in Harley & Mayo, *Toward Checklist Fl. Bahia* 191. 1980.

*LIPPIA RIVALIS* Mold., *Phytologia* 45: 37--38. 1980.

Bibliography: Mold., *Phytologia* 45: 37--38. 1980; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

Citations: BRAZIL: Bahia: Hatschbach 42128 (Z--type).

*LIPPIA RODRIGUEZII* Mold.

Additional bibliography: Mold., *Phytologia* 39: 449. 1978; Mold., *Phytol. Mem.* 2: 189 & 562. 1980.

*LIPPIA RONDONENSIS* Mold.

Additional bibliography: Mold., *Phytologia* 39: 449. 1978; Mold., *Phytol. Mem.* 2: 134, 149, 175, & 562. 1980.

Recent collectors describe this plant as an herb, 1 m. tall, or as a shrub, 2 m. tall, fragrant, used medicinally against colic in Peru, where it is called "quiche oregano", and found it growing in fields and cultivated areas, flowering in January. The corollas are said to have been "pale-purple with a yellow center" on Prance & Ramos 23627 and these collectors note that it is used as an admixture with *Justicia pectoralis* in Virola snuff, used in this way by all the Tototobi Amerinds, who call it "cedrera" or "makiupa-hanak".

The species is obviously very closely related to or a derivative of the very variable *L. alba* (Mill.) N. E. Br.

Material of *L. rondonensis* has been misidentified and distributed in some herbaria as "*Labiatae*".

Additional citations: PERU: Huánuco: *Schanke Vigo 1522* (W--2865161). BRAZIL: Acre: *Santos, Mota, & Ramos 90* (Z). Amazonas: *Prance & Ramos 23627* (Z).

*LIPPIA ROSELLA* Mold.

Additional bibliography: Mold., *Phytologia* 39: 437 & 449--450. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA ROSMARINIFOLIA* Anderss.

Additional synonymy: *Lippia rosmarinifolia* Anders. ex López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 28, sphalm. 1979.

Additional bibliography: López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 28. 1979; Mold., *Phytologia* 41: 149 (1979) and 44: 384. 1979; Mold., *Phytol. Mem.* 2: 130, 422, & 562. 1980.

*LIPPIA ROSMARINIFOLIA* f. *LATIFOLIA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 39: 451 (1978) and 44: 384. 1979; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 28. 1979; Mold., *Phytol. Mem.* 2: 130, 421, & 562. 1980.

Werff found this plant growing on the vertical walls of a volcano crater, at 2400 feet altitude, flowering in September, and describes it as a shrub, the leaves entire or incised, and the "flowers" [corollas] yellow and fragrant.

Additional citations: GALAPAGOS ISLANDS: Santiago: *Werff 2345* (N).

*LIPPIA ROSMARINIFOLIA* f. *STEWARTII* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 41: 149. 1979; Mold., *Phytol. Mem.* 2: 130, 421, 422, & 562. 1980.

*LIPPIA ROTUNDIFOLIA* Cham.

Additional bibliography: Mold., *Phytologia* 39: 452--453. 1978; Mold., *Phytol. Mem.* 2: 149 & 562. 1980.

*LIPPIA RUBIGINOSA* Schau.

Additional bibliography: Mold., *Phytologia* 39: 453. 1978; Mold., *Phytol. Mem.* 2: 149 & 562.

*LIPPIA RUGOSA* A. Chev.

Additional bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 39 (2): 320. 1913; Mold., *Phytologia* 39: 453--454. 1978; Mold., *Phytol. Mem.* 2: 207, 213, 214, & 562. 1980; Mold., *Phytologia* 48: 155. 1981.

*LIPPIA RZEDOWSKII* Mold.

Additional bibliography: Mold., *Phytologia* 39: 454. 1978; Mold., *Phytol. Mem.* 2: 65 & 562. 1980.

*LIPPIA SALAMENSIS* Loes.

Additional bibliography: Mold., *Phytologia* 39: 442 & 454. 1978; Mold., *Phytol. Mem.* 2: 72 & 562. 1980.

*LIPPIA SALICIFOLIA* Anderss.

Additional bibliography: Mold., *Phytologia* 39: 454. 1978; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 28. 1979; Mold., *Phytol. Mem.* 2: 130 & 562. 1980.

*LIPPIA SALSA* Griseb.

Additional bibliography: Mold., *Phytologia* 41: 150. 1979; Mold., *Phytol. Mem.* 2: 189 & 562. 1980.

Burkart refers to this plant as an abundant shrub, to 1.2 m. tall, in saline areas of Santiago del Estero, Argentina. The corollas are said to have been "light-blue" on *Botta & Guoglio-none 828* and "blanca, lilacina antes de abrir" on *Burkart 30600*.

Additional citations: ARGENTINA: Catamarca: *Botta & Guoglio-none 828* (Go). Santiago del Estero: *Burkart 30600* (Au); *Cabrera, Botta, Ezcurra, Mulgura, & Ragonese 29678* (W--2893722).

*LIPPIA SALVIAEFOLIA* Cham.

Additional bibliography: Mold., *Phytologia* 41: 150. 1979; Mold., *Phytol. Mem.* 2: 149, 175, 178, 189, & 562. 1980.

Recent collectors describe this plant as a shrub, 2 m. tall,, and have found it growing in cerrado, at 900 m. altitude, in anthesis in February and April. The corollas are said to have been "white" on *Macedo 5281*, *Schaller 103*, and *Shepherd & al. 7308*.

Additional citations: BRAZIL: Mato Grosso: *Schaller 103* (N). Minas Gerais: *Armando & Rizzini 5* (N); *Irwin, Fonsêca, Souza, Reis dos Santos, & Ramos 28042* (N); *Macedo 5281* (Eu--53633). São Paulo: *Shepherd, Semir, Andrade, & Salgado 7308* (W--2883666).

*LIPPIA SANDWITHIANA* Mold.

Additional bibliography: Mold., *Phytologia* 39: 456. 1978; Mold., *Phytol. Mem.* 2: 178 & 562. 1980.

*LIPPIA SATUREIAEFOLIA* Mart. & Schau.

Additional bibliography: Mold., *Phytologia* 39: 456. 1978; Mold., *Phytol. Mem.* 2: 149, 422, & 562. 1980.

Recent collectors refer to this species as a scandent shrub and have encountered it on campo rupestre, at 1000 m. altitude, flowering in July. The corollas are said to have been "reddish" on the collection cited below.

Additional citations: BRAZIL: Bahia: *Mori, King, Santos, & Hage 12318* (W--2854247, Z).

*LIPPIA SAVORYI* Meikle

Additional bibliography: Mold., *Phytologia* 40: 58. 1978; Hocking, *Excerpt. Bot. A.33*: 88. 1979; Mold., *Phytol. Mem.* 2: 211, 213, 220, 234, & 562. 1980.

*LIPPIA SCABERRIMA* Sond.

Additional bibliography: Dithens, *Afric. Handb.* 8: [Drug Pl. Afr.] 94. 1949; Mold., *Phytologia* 41: 150. 1979; Mold., *Phytol. Mem.* 2: 243, 246, 422, & 562. 1980; Mold., *Phytologia* 48: 176. 1981.

Dahlstrand has encountered this plant growing in roadcuts, at 1200--1600 m. altitude, flowering and fruiting in January.

Additional citations: SOUTH AFRICA: Transvaal: *Dahlstrand 442* (Go), *1133* (Go).

*LIPPIA SCAPOSA* Briq.

Additional bibliography: Mold., *Phytologia* 40: 59. 1978; Mold., *Phytol. Mem.* 2: 178 & 562. 1980.

*LIPPIA SCAPOSA* var. *MELANOCAULOS* Briq.

Additional bibliography: Mold., *Phytologia* 40: 59. 1978; Mold., *Phytol. Mem.* 2: 178 & 562. 1980.

*LIPPIA SCHAUERIANA* Mart.

Additional bibliography: Mold., *Phytologia* 40: 59. 1978; Mold., *Phytol. Mem.* 2: 149, 422, & 562. 1980; Mold. & Bronley in Harley & Mayo, *Toward Checklist Fl. Bahia* 191. 1980.

Harley and his associates describe this species as a spindly shrub, to 2.5 m. tall, the leaves aromatic, rugose, pale-green above, grayish-green beneath, the bracts pale-green, and the corolla "pink", and have found it growing among rocks in cerrado in an area of rocky riversides with rapids, riverine vegetation, cerrado with limestone outcrops, and some grassland subject to flooding, at 980 m. altitude, flowering in March.

Additional citations: BRAZIL: Bahia: *Harley, Mayo, Storr, Santos, & Pinheiro in Harley 20147* (N, Z).

*LIPPIA SCHLIEBENI* Mold.

Additional bibliography: Mold., *Phytologia* 40: 60 & 80. 1978; Mold., *Phytol. Mem.* 2: 220, 227, 231, 422, & 562. 1980.

*LIPPIA SCHLIMII* Turcz.

Additional bibliography: López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 28. 1979; Mold., *Phytologia* 41: 150--151. 1979; Mold., *Phytol. Mem.* 2: 109, 116, 422, & 562. 1980.

López-Palacios (1979) records the variant vernacular name, "sacacandela", for this species.

*LIPPIA SCHLIMII* var. *GLABRESCENS* (Mold.) Mold.

Emended synonymy: *Lippia floribunda* Humb. & Bonpl. apud Steud., *Nom. Bot. Phan.*, ed. 1, 485. 1821.

Additional bibliography: Steud., *Nom. Bot. Phan.*, ed. 1, 485 (1821) and ed. 2, 2: 54. 1841; D. Dietr., *Syn. Pl.* 3: 599. 1843; Knuth, *Feddes Repert. Spec. Nov. Beih.* 43: [Init. Fl. Venez.] 603. 1927; López-Palacios, *Revist. Fac. Farm. Univ. Andes* 20: 28. 1979; Mold., *Phytologia* 41: 150--151. 1979; Mold., *Phytol. Mem.* 2: 109, 116, 357, 420, 422, & 562. 1980.

Recent collectors describe this plant as a shrub, 2 m. tall, or a tree, 4--10 m. tall, the leaves aromatic, shiny, rugose, gray-green or sometimes dark- or brilliant-green above and dull-green beneath, rather rigid but fragile, the floral bracts pale-green, and have encountered it on wet forested slopes and steep slopes along streams, at 1650--3530 m. altitude, flowering in June, July, September, and October. Luteyn and his associates report it "common on forested slopes in montane cloud forests".



The corollas are said to have been "white" on *Cuatrecasas* 20753, *Cuatrecasas & Rodriguez* 27934 & 27972, *Steyermark & Liesner* 118550, and *Trujillo* 8170 and "greenish-white" on *Steyermark & Liesner* 118230. *Cuatrecasas* refers to the leaves on his no. 20753 being "amarillento-oscura". He and *Rodriguez* refer to the inflorescences as "pale-grayish" or "greenish-white" and the corollas themselves as "white". The flowering heads are unusually large on *Cuatrecasas & Rodriguez* 27838. A vernacular name recorded for the plant is "salvia".

Knuth (1927) cites *Linden* 341 from Mérida and Trujillo, Venezuela.

Additional citations: COLOMBIA: Boyacá: *Cuatrecasas & Rodriguez* 27838 (W--2616135). Norte de Santander: *Cuatrecasas & Rodriguez* 27934 (W--2616159). Norte de Santander/Cesar: *Cuatrecasas & Rodriguez* 27972 (W--2616190). Valle del Cauca: *Cuatrecasas* 20753 (W--2817820). VENEZUELA: Mérida: *Trujillo* 8170 (Eu--47847). Táchira: *Luteyn, Luteyn, & Ruiz-Teran* 5994 (N); *Steyermark & Liesner* 118230 (Ld), 118550 (Ld).

#### LIPPIA SCHOMBURGKIANA Schau.

Additional bibliography: Oliv., Trans. Linn. Soc. Lond. Bot., ser. 2, 2: 288. 1887; N. E. Br., Trans. Linn. Soc. Lond. Bot., ser. 2, 6: 57. 1901; Knuth, Feddes Repert. Spec. Nov. Beih. 43: [Init. Fl. Venez.] 603. 1927; López-Palacios, Revist. Fac. Farm. Univ. Andes 20: 28. 1979; Mold., Phytologia 41: 147 & 151. 1979; Mold., Phytol. Mem. 2: 116, 122, 149, 422, & 562. 1980; Mold. & Bromley in *Harley & Mayo*, Toward Checklist Fl. Bahia 191. 1980; Mold., Phytologia 48: 182. 1981.

*Harley* and his associates, distributing it as *L. microphylla* Cham., describe this plant as a spindly-stemmed shrub, 1.5--4 m. tall, with a sage-like scent, the stems slender, brittle, the leaves aromatic, rugose, rather dark-green or rich-green above, paler or gray-green beneath, the bracts pale-green, the sepals pale-green, and have found it growing "on hillside and associated rocky riverbed with sandstone rocks and some sparse forest and scrub" and in "caatinga on sand and with quartzitic rocks and metamorphosed sandstone forming rock areas with more open vegetation including extensive areas of *Vellozia*", at 400--1000 m. altitude, flowering and fruiting in February. The corollas are said to have been "white with yellowish tube and yellow in the throat" on their no. 18603, "white with orange-yellow throat" on 19011, and "cream with orange-yellow throat" on 18929.

Knuth (1927) cites *Connell & Quelch* 2, 235, & 720 and *ImThurn* 52 from the Roraima region of Venezuela.

The *Davidse, Ramia, & Montes* 4747, distributed as *L. schomburgkiana*, actually is *L. origanoides* H.B.K.

Additional citations: BRAZIL: Bahia: *Harley, Mayo, Storr, Santos, & Pinheiro* in *Harley* 18603 (Ld, N), 18929 (Ld, N), 19011 (Ld, N); *Pinheiro* 2140 (Ld); T. S. Santos 2529 (Ld).

#### LIPPIA SCLEROPHYLLA Briq.

Additional bibliography: Mold., Phytologia 40: 63--64. 1978; Mold., Phytol. Mem. 2: 178, 189, & 562. 1980.

*LIPPIA SCLEROPHYLLA* var. *LORETENSIS* Mold.

Additional bibliography: Mold., *Phytologia* 40: 64. 1978; Mold., *Phytol. Mem.* 2: 189 & 562. 1980.

*LIPPIA SERICEA* Cham.

Additional bibliography: Mold., *Phytologia* 40: 64--65. 1978; Mold., *Phytol. Mem.* 2: 149, 422, & 562. 1980.

Additional citations: BRAZIL: Minas Gerais: *Irwin, Fonsêca, Souza, Reis dos Santos, & Ramos 26917* (N).

*LIPPIA SESSILIFLORA* J. G. Baker

Additional bibliography: Mold., *Phytologia* 40: 65. 1978; Mold., *Phytol. Mem.* 2: 368 & 563. 1980.

*LIPPIA SIDOIDES* Cham.

Additional bibliography: Mold., *Phytologia* 40: 65--66. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980.

The Héring & al. collection, cited below, was collected as a voucher for phytochemical studies.

Additional citations: BRAZIL: Distrito Federal: *Héring, Elias de Paula, Cunha de Mendonça, & Héring Salles 1242* (N). Rondônia: *Vieira, Petersen, Nelson, Ramos, & Mota 1008* (N, Z).

*LIPPIA SIDOIDES* f. *FLACCIDA* Hayek

Additional bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 39 (2): 320. 1913; Mold., *Phytologia* 40: 66. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980.

*LIPPIA SOMALENSIS* Vatke

Additional bibliography: Chiov., *Fl. Somala* [1]: 49. 1929; Mold., *Phytologia* 40: 66. 1978; Mold., *Phytol. Mem.* 2: 204, 231, & 563. 1980.

*LIPPIA STACHYOIDES* Cham.

Additional bibliography: Mold., *Phytologia* 40: 66--67. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980.

Additional citations: BRAZIL: Mato Grosso: *Hatschbach & Koczicki 33231* (W--2839444).

*LIPPIA SUBRACEMOSA* Mansf.

Additional bibliography: Mold., *Phytologia* 40: 67. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980; Mold. & Bromley in *Harley & Mayo, Toward Checklist Fl. Bahia* 191. 1980.

*LIPPIA SUBRACEMOSA* var. *HARLEYI* Mold.

Additional bibliography: Mold., *Phytologia* 40: 67. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980; Mold. & Bromley in *Harley & Mayo, Toward Checklist Fl. Bahia* 191. 1980.

*LIPPIA SUBSTRIGOSA* Turcz.

Additional bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 40 (2): 335. 1915; Mold., *Phytologia* 40: 67--70, 81, & 82. 1978; Mold., *Phytol. Mem.* 2: 65, 72, 74, 76, 78, 79, 422, & 563. 1980.

Recent collectors describe this plant as a weak shrub, 2--3 m. tall, or a small tree to 5 m. tall, and have encountered it in secondary woods of *Trema micrantha*, "common" in mixed forests, or "dominant as secondary growth following milpas", at 1300--2180 m. altitude, flowering in January and March, fruiting in January. The corollas are said to have been "yellow" on *Ton 3661*, "pale-yellow" on *Molina R. 20433*, and "yellowish" on *Molina R. & Montalvo 21806*.

Hernandez Xolocotzi asserts that the wood of this species is used for roofing material. Vernacular names reported are "orégano de árbol", "palo gusano", and "salvia". Material has been misidentified and distributed in some herbaria as *Lantana* sp.

Additional citations: MEXICO: Chiapas: *Hernandez Xolocotzi X.1444* (Me, Me); *Miranda 6110* (Me--71817), *6188* (Me--71812). *9164* (Me--68426); *Ton 3661* (Ws). GUATEMALA: Guatemala: *Molina R., Burger, & Wallenka 15987* (W--2840312). EL SALVADOR: San Salvador: *Molina R. & Montalvo 21806* (Ws). NICARAGUA: Matagalpa: *Molina R. 20433* (W--2866762).

*LIPPIA SUFFRUTICOSA* (Griseb.) Kuntze

Additional bibliography: *Mold.*, *Phytologia* 40: 70. 1978; *Mold.*, *Phytol. Mem.* 2: 175, 189, & 563. 1980.

*LIPPIA TAYACAJANA* *Mold.*

Additional bibliography: *Mold.*, *Phytologia* 40: 70. 1978; *Mold.*, *Phytol. Mem.* 2: 134 & 563. 1980.

*LIPPIA TAYACAJANA* var. *SESSILIFLORA* *Mold.*

Additional bibliography: *Mold.*, *Phytologia* 40: 70. 1978; *Mold.*, *Phytol. Mem.* 2: 134 & 563. 1980.

Ellenberg encountered what appears to be this plant on semi-deserts, at 3395 m. altitude.

Additional citations: PERU: Ica: *Ellenberg 4912a* (W--2852647).

*LIPPIA TEGULIFERA* *Briq.*

Additional bibliography: *Mold.*, *Phytologia* 40: 70--71. 1978; *Mold.*, *Phytol. Mem.* 2: 178, 189, 422, & 563. 1980.

*LIPPIA TEGULIFERA* var. *GRISEA* *Briq.*

Additional bibliography: *Mold.*, *Phytologia* 40: 71. 1978; *Mold.*, *Phytol. Mem.* 2: 178 & 563. 1980.

*LIPPIA TEGULIFERA* var. *OVATA* *Briq.*

Additional bibliography: *Mold.*, *Phytologia* 40: 71. 1978; *Mold.*, *Phytol. Mem.* 2: 149, 178, 189, & 563. 1980.

*LIPPIA TEGULIFERA* var. *PEDUNCULATA* *Briq.*

Additional bibliography: *Mold.*, *Phytologia* 40: 71. 1978; *Mold.*, *Phytol. Mem.* 2: 178 & 563. 1980.

*LIPPIA TEPICANA* *Mold.*

Additional bibliography: *Mold.*, *Phytologia* 40: 71. 1978; *Mold.*,

Phytol. Mem. 2: 65 & 563. 1980.

*LIPPIA THYMOIDES* Mart. & Schau.

Additional bibliography: Mold., *Phytologia* 40: 71--72. 1978; Mold., *Phytol. Mem.* 2: 149, 421, 422, & 563. 1980; Mold. & Bromley in Harley & Mayo, *Toward Checklist Fl. Bahia* 191. 1980.

Recent collectors refer to this plant as a very common spindly shrub, 1.5--2 m. tall, the branches straight, divaricate, brittle, growing on granite cliffs and in open secondary vegetation with small trees and shrubs, at 700--900 m. altitude, flowering in March. The corollas are described as "white with a yellow eye" on Mori & al. 11075 and "white with a yellow throat" on Harley 20194.

Additional citations: BRAZIL: Bahia: Harley, Mayo, Storr, Santos, & Pinheiro in Harley 20194 (Ld, N); Mori, Mattos Silva, Kalunki, & Santos 9956 (Ld, N); Mori, Santos, & Thompson 11075 (Ld, N); Pinheiro 1412 (Ld); T. S. Santos 2508 (Ld).

*LIPPIA THYMOIDES* var. *MUCRONULATA* Mold.

Additional bibliography: Mold., *Phytologia* 40: 72. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980.

*LIPPIA THYMOIDES* var. *TONSILIS* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 40: 72. 1978; Mold., *Phytol. Mem.* 2: 149, 421, & 563. 1980; Mold. & Bromley in Harley & Mayo, *Toward Checklist Fl. Bahia* 191. 1980.

Recent collectors describe this plant as a shrub, 3 m. tall, with spreading stems and aromatic leaves, pale-green above, paler beneath, and have encountered it on floodplains with riverine and chiefly herbaceous weedy vegetation, at 980 m. altitude, flowering in March. The corollas are said to have been "lilac with yellow throat" on Harley 19838.

Additional citations: BRAZIL: Bahia: Harley, Mayo, Storr, Santos, & Pinheiro in Harley 19838 (Ld, N).

*LIPPIA TORRESII* Standl.

Additional bibliography: Mold., *Phytologia* 40: 72--73 & 82. 1978; Mukherjee & Chanda, *Trans. Bose Res. Inst.* 41: 40. 1978; Mold., *Phytol. Mem.* 2: 65, 81, 84, 357, & 563. 1980.

The *Calzada 2170*, cited below, has previously been regarded as representing *L. umbellata* Cav. or *L. pringlei* Briq., but seems better placed here.

Additional & emended citations: MEXICO: Veracruz: *Calzada 2170* (N). COSTA RICA: Heredia: *Hartshorn 1074* (N), *1085* (Ld).

*LIPPIA TRACHYPHYLLA* Briq.

Additional bibliography: Mold., *Phytologia* 40: 74. 1978; Mold., *Phytol. Mem.* 2: 175, 178, 189, & 563. 1980

*LIPPIA TRISTIS* Briq.

Additional bibliography: Mold., *Phytologia* 40: 74 & 78. 1978; Mold., *Phytol. Mem.* 2: 178 & 563. 1980.

*LIPPIA TRISTIS* var. *ABERRANS* Briq.

Additional bibliography: Mold., *Phytologia* 40: 74. 1978; Mold., *Phytol. Mem.* 2: 178 & 563. 1980.

*LIPPIA TROLLII* Mold.

Additional bibliography: Mold., *Phytologia* 40: 74. 1978; Mold., *Phytol. Mem.* 2: 175, 189, & 563. 1980.

*LIPPIA TROLLI* var. *INERMIS* Mold.

Additional bibliography: Mold., *Phytologia* 40: 74. 1978; Mold., *Phytol. Mem.* 2: 175 & 563. 1980.

*LIPPIA TURBINATA* Griseb.

Additional & emended bibliography: Griseb., Pl. Lorentz. 195. 1874; Reiche & Phil. in Reiche, *Estud. Crit. Fl. Chile* 5: 298 & 301--302. 1910; Sanzin, *Anal. Soc. Cient. Argent.* 88: 97, 98, 100, 102, & 134, fig. 4. 1919; Fester & al., *Anal. Asoc. Quím. Argent.* 40: 38--42 (1952) and 42: 43--53. 1955; Mold., *Phytologia* 41: 151. 1979; Troncoso in Burkart, *Fl. Ilustr. Entre Ríos* 5: 230 & 272--273. 1979; Mold., *Phytol. Mem.* 2: 134, 183, 189, 357, & 563. 1980.

Emended illustrations: Sanzin, *Anal. Soc. Cient. Argent.* 88: 102, fig. 4. 1919.

Sanzin (1919) affirms that this species is characteristic of the subandean zone, 900--1500 m. altitude, in Argentina. Reiche & Philippi (1910) comment that "En los cordilleras de las provincias de Atacama; en territorii chileno?" Troncoso (1979) says "Muy difundida en la región fitogeográfica del Monte. De dudoso indigenato en Entre Ríos", Argentina. She lists the vernacular names, "poleo" and "té del país", and cites only *Serié & Migata s.n.* She notes that the species is "Medicinal; a la infusión de las hojas se le atribuyen propiedades diuréticas; estomacales, etc., muy difundida en la medicina popular. Rica en esencias colátiles".

The *Krapovickas & Cristóbal 14659*, distributed as the typical form of this species, actually represents *f. angustifolia* Osten.

*LIPPIA TURBINATA* f. *ANGUSTIFOLIA* Osten

Additional bibliography: Mold., *Phytologia* 40: 76--77. 1978; Mold., *Phytol. Mem.* 2: 183, 189, & 563. 1980.

Recent collectors describe this plant as a shrub, 1.5 m. tall, and have found it in flower and fruit in January. The corollas are said to have been white on the collection cited below.

Additional citations: ARGENTINA: Cordoba: *Krapovickas & Cristóbal 14659* (Ws).

*LIPPIA TURBINATA* f. *MAGNIFOLIA* Mold.

Additional bibliography: Mold., *Phytologia* 40: 76 & 77. 1989; Mold., *Phytol. Mem.* 2: 189, 357, & 563. 1980.

*LIPPIA TURNERIFOLIA* Cham.

Additional bibliography: Mold., *Phytologia* 40: 78--79. 1978; Mold., *Phytol. Mem.* 2: 149, 175, 178, 180, 189, & 563. 1980; Mold., *Phytologia* 48: 165. 1981.

Recent collectors have found this plant on campo and rocky campo, describing it as xylopodiferous, flowering in September and October. The corollas are said to have been "yellow" on the two collections cited below.

The *Krapovichas, Cristóbal, & Schinini 26496*, distributed as *L. turnerifolia*, actually is the very similar *L. asperrima* Cham.

Additional citations: BRAZIL: Paran : *Dziewa 47* (Eu--37817); *Hatschbach 15042* (Eu--1891).

*LIPPIA TURNERIFOLIA* var. *ANGUSTA* Kuntze

Additional bibliography: Mold., *Phytologia* 40: 79. 1978; Mold., *Phytol. Mem.* 2: 178 & 563. 1980.

*LIPPIA TURNERIFOLIA* var. *SESSILIFOLIA* Mold.

Additional bibliography: Mold., *Phytologia* 40: 79. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980.

*LIPPIA UKAMBENSIS* Vatke

Additional bibliography: Mold., *Phytologia* 40: 79--80. 1978; Holm, Pancho, Herberger, & Plucknett, *Geogr. Atlas World Weeds* 218. 1979; Mold., *Phytol. Mem.* 2: 227, 231, & 563. 1980.

*LIPPIA UMBELLATA* Cav.

Additional bibliography: Mold., *Phytologia* 41: 151. 1979; Mold., *Phytol. Mem.* 2: 65 & 563. 1980.

Recent collectors describe this plant as a shrub or tree, 3--4 m. tall, with "latex en la flor", scarce or very scarce in oak woods on hillsides, at 2500--2600 m. altitude, in flower in November. Others refer to it as "quite woody and aromatic", the inflorescences clustered at the ends of the branches, the calyxes in the axils of large bracts, and have found it growing in weathered limestone soil on the shaded east-facing sides of steep roadcuts adjacent to rocky streambeds, at only 1080 m. altitude, in fruit in November. The "flowers" are said to have been "green" on *Ventura A. 2501* and the corollas "yellow" on *Ventura A. 2370*.

Additional citations: MEXICO: Distrito Federal: *Ventura A. 2370* (N), *2501* (Me--275783). Durango: *Peterson & Broome 454* (F). M xico: *J. Rzedowski 28722* (Ws).

*LIPPIA VELUTINA* Schau.

Additional bibliography: Mold., *Phytologia* 40: 82. 1978; Mold., *Phytol. Mem.* 2: 149 & 563. 1980.

Strang has found this plant in anthesis in July, but erroneously distributed as "*Labiatae*".

Additional citations: BRAZIL: Minas Gerais: *Strang 1108* [Castellanos 26691; Herb. Brad. 50068] (Eu--3;228).

*LIPPIA VERNONIOIDES* Cham.

Additional bibliography: Hocking, *Excerpt. Bot. A.* 25: 378. 1975; Mold., *Phytologia* 40: 83--85 & 201 (1978) and 47: 88. 1980; Mold., *Phytol. Mem.* 2: 149, 175, 420, & 563. 1980.

*LIPPIA VERNONIOIDES* var. *ATTENUATA* (Mart.) Mold.

Additional bibliography: D. Dietr., Syn. Pl. 3: 600. 1843; Hocking, Excerpt. Bot. A.25: 378. 1975; Mold., Phytologia 40: 201. 1978; Mold., Phytol. Mem. 2: 149, 175, 357, 372, 419, 420, & 563. 1980.

Recent collectors refer to this plant as a very fragrant, medicinal subshrub, 1 m. tall, and have encountered it in cerrado, at 550 m. altitude, flowering in April, May, and July, fruiting in July. They record the vernacular name, "toronjil". The corollas are said to have been "white" on *Krapovickas & Schinini 31967*.

The Jensen specimen, cited below, is placed here tentatively as it consists mostly of almost pulverized leaves, with only one reasonably good intact leaf; it comprises a crude drug sample from the collections of S. B. Penick & Company, Jersey City, New Jersey, given to me by Dr. George M. Hocking for identification, who states that it was listed formally as "*LIPPIA* LEAVES, *L. hastata* (*Salvia Sija*)" and obtained originally from Jensen in Seattle, Washington, in or about 1945.

Additional citations: BRAZIL: Goiás: *C. Pereira 492* (Ld). BOLIVIA: Santa Cruz: *Krapovickas & Schinini 31967* (Ld), *32146* (Ld). CULTIVATED: Washington: *Jensen s.n.* [Seattle, ca. 1945] (Z).

*LIPPIA VERNONIOIDES* f. *SUBTRUNCATA* Mold., Phytologia 47: 88. 1980.

Bibliography: Mold., Phytologia 47: 88. 1980; Mold., Phytol. Mem. 2: 157 & 563. 1980.

Citations: BRAZIL: São Paulo: *Leitão Filho & al. 7372* (W--2883728--type, Z--photo of type).

*LIPPIA VILLAFLORIDANA* Kuntze

Additional bibliography: Mold., Phytologia 40: 201--202. 1978; Hocking, Excerpt. Bot. A.33: 88. 1979; Troncoso in Burkart, Fl. Ilustr. Entre Rios 5: 272, 275, & 276, fig. 130 a--l. 1979; Mold., Phytol. Mem. 2: 149, 178, 180, 189, & 563. 1980.

Illustrations: Troncoso in Burkart, Fl. Ilustr. Entre Rios 5: 276, fig. 130 a--l. 1979.

Troncoso (1979) regards *L. asperrima* var. *longepedunculata* Mold. as a synonym of *L. villafloridana*. She says that the species "Habita en campos secos y lugares abiertos", citing Burkart 26034 & 26355, Galli 251, Guaglianone & Ragonese s.n., Hauman s.n., Job 43, Meyer 11086, Nicora 5941, and Pedersen 6256. She asserts that the species has definitely *diclinous* flowers

*LIPPIA VINOSA* Mold.

Additional bibliography: Mold., Phytologia 40: 202. 1978; Mold., Phytol. Mem. 2: 149 & 563. 1980.

*LIPPIA VOLKII* Mold.

Additional bibliography: Mold., Phytologia 40: 202. 1978; Mold., Phytol. Mem. 2: 243 & 563. 1980.

*LIPPIA WHYTEI* Mold.

Additional bibliography: Mold., Phytologia 40: 202. 1978; Mold., Phytol. Mem. 2: 220, 224, 227, 231, 236, 238, 239, 241, & 563.

1980; Mold., *Phytologia* 48: 176. 1981.

Dahlstrand encountered this plant along roadsides, at 1800 m. altitude, in flower and fruit in March.

Additional citations: ZIMBABWE: *Dahlstrand* 58 (Go).

*LIPPIA WILMSII* H. H. W. Pearson

Additional bibliography: Good & Exell, *Journ. Bot.* 68: Suppl. 2: 140. 1930; Mold., *Phytologia* 40: 202--204. 1978; Mold., *Phytol. Mem.* 2: 223, 227, 236, 238, 239, 241, 243, 246, & 563. 1980.

*LIPPIA WILMSII* var. *SCABERRIMA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 40: 204. 1978; Mold., *Phytol. Mem.* 2: 238, 239, 246, & 563. 1980.

*LIPPIA WILMSII* var. *VILLOSA* (Mold.) Mold.

Additional bibliography: Mold., *Phytologia* 40: 204. 1978; Mold., *Phytol. Mem.* 2: 220, 223, 224, 227, 231, 234, 236, 238, & 563. 1980.

*LIPPIA WOODII* Mold.

Additional bibliography: Mold., *Phytologia* 40: 204. 1978; Mold., *Phytol. Mem.* 2: 238, 239, 246, & 563. 1980.

*LIPPIA YUCATANA* Loes.

Additional bibliography: Fedde & Schust., *Justs Bot. Jahresber.* 39 (2): 320. 1913; Fedde & Schust., *Justs Bot. Jahresber.* 40 (2): 335. 1915; Mold., *Phytologia* 40: 204--205. 1978; Hocking, *Excerpt. Bot. A.33*: 88. 1979; Mold., *Phytol. Mem.* 2: 65 & 563. 1980.

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#### ADDITIONAL NOTES ON THE GENUS *CITHAREXYLUM*. XVIII

Harold N. Moldenke

*CITHAREXYLUM* B. Juss.

Additional & emended bibliography: Sandmark in L., *Amoen. Acad.* 5: 380. 1759; Loud., *Hort. Brit.*, ed. 1, 248 & 529 (1830) and ed. 2, 248 & 529. 1832; G. Don in Loud., *Hort. Brit.*, ed. 3, 248 & 529. 1839; G. Don in Sweet, *Hort. Brit.*, ed. 3, 551. 1839; Ulrich, *Internat. Wörterb.*, ed. 1, 56 (1871) and ed. 2, 56. 1875; Stahl, *Estud. Fl. Puerto Rico*, ed. 1, 3: 293. 1888; D. H. Scott in Solered., *Syst. Anat. Dicot.* [transl. Boodle & Fritsch] 2: 1021 & 1022. 1908; Urb., *Symb. Antil.* 4: 535. 1911; Firminger, *Man. Gard. India*, ed. 6, 2: 386. 1918; Stahl, *Estud. Fl. Puerto Rico*, ed. 2, 3: 293. 1937; Klein, *Sellowia* 31: 163. 1979; Olmsted, Loope, & Hilsenbeck, *So. Fla. Res. Cent. Rep. T.604*: 34 & 48. 1980; Wiggins, *Fl. Baja Calif.* 33, 525, 526, & 529, fig. 496. 1980; Mold., *Phytologia* 47: 359--360 & 504. 1981.

It is of passing interest to note that Reichenbach (1828) classified this genus (as also all the rest of the *Verbenaceae*) in the *Labiatae* [=Lamiaceae].